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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,253	08/26/2003	Yasunori Ando	116942	2080

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EXAMINER
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HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/647,253

Applicant(s)

ANDO ET AL.

Examiner

John Hoffmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Group II in the reply filed on 16 February 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-9 and 19-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 16 February 2005.

Applicant's general allegations (that the restriction was improper, that there is no serious burden, etc.) does not constitute a traversal. Applicant has not provided (nor shown any attempt to provide) anything specific or distinct which support the general allegations.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-13 and 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims have ranges that are claimed "range from...and..." Examiner is not clear whether as to how it should be interpreted. Examiner is only familiar with language such as "a range between X and Y" and "a range from X to Y"; examiner is unclear if such is the proper way to interpret the claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 10-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Mori 4243621.

See table 3 of Mori (at col. 14). The ratio of Si:SiC is about 18:100. The molding and subjecting steps are taught at col. 13: lines 59-68. As to the method being "for making a microporous ceramic material": it is deemed that the preamble does not breathe life and meaning into a claim, because the body is silent as to any resultant "microporous ceramic material" or any ceramic material. It does not appear reasonable for the Office to dictate/limit the scope of the claim.

For example, the specific steps could be "for making" a porous body, because one can grind it and use it to make a microporous body. Nevertheless, this is not to be interpreted as a suggestion that limiting the claim to a microporous body would make the claims allowable. Mori discloses a porous body and other art of record clearly

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demonstrate that microporosity would not be a patentable invention – absent some secondary showing.

Claim 11: Referring again to Table 3: there are three different silicon carbide powders. The claim is comprising in nature and can have other silicon carbide powders. The 12:40% 1-0.25mm powder corresponds to a 30:100 ratio.

Claim 13: It is deemed that the Mori value of 1 ton/cm<sup>2</sup> is in the range of 10,000,000,000 MPa and 0.0000001 Pa. The 10,000,000,000 Mpa is “more than 30 Mpa” and 0.0000001 MPa is less than 200 Mpa.

Claim 12: a relevant range is from 10 cm to 1 angstrom. 10 cm is more than 1 micron and 1 angstrom is less than 50 microns.

Claims 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Pompe 4492665.

See col. 5, lines 15-45 as well as claim 3 of Pompe: the claimed preparing, molding and subjecting are clearly taught.

As to the dependent claims (and the preamble), as indicated above, they are very broad and fail to define over Pompe. The broadest reasonable interpretation of claims 15-18 are commensurate with the broadest reasonable interpretation of claims 11-13 as suggested above

The PTO gives a disputed claim term its broadest reasonable interpretation during patent prosecution. Hyatt, 211 F.3d at 1372. The “broadest reasonable interpretation” rule recognizes that “before a patent is granted the claims are readily amended as part of the examination process.” Burlington Indus. v. Quigg, 822 F.2d 1581, 1583 (Fed. Cir. 1987). Thus, a patent applicant has the opportunity and responsibility to remove any ambiguity in claim term meaning by amending the

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application. In re Prater, 415 F.2d 1393, 1404-05 (CCPA 1969). Additionally, the broadest reasonable interpretation rule “serves the public interest by reducing the possibility that claims, finally allowed, will be given broader scope than is justified.” In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004) (quoting In re Yamamoto, 740 F.2d 1569, 1571-72 (Fed. Cir. 1984)).

Again, amending the claims to comport to a narrow reasonable interpretation of the present claims does not appear to define allowable subject matter. The references of record suggests that the specific difference (particle size, porosity, etc.) would have been obvious. The effects of all the claimed variables are well understood in the ceramic processing art. And is routine modification/choice depending upon what product one desires to obtain.

### ***Conclusion***

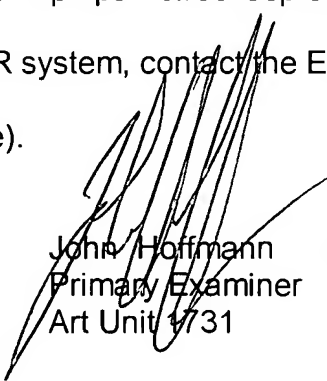
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bates, Yoshida, Schonfelder, Izaki, Mangels, Takeuchi are cited as being a sample of the relevant prior art that is directed to the SiC-Si-Si<sub>3</sub>N<sub>4</sub> reaction sintering art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John Hoffmann  
Primary Examiner  
Art Unit 1731

4-6-05

jmh